WHEN IT IS IMPORTANT TO KNOW WHAT HAS HAPPENED ...

… THE DMCP-20A KEEPS THE RECORD STRAIGHT

PROGRAMMABLE MULTICHANNEL DATA LOGGER AND RECORDER FOR MONITORING PRESSURE, TEMPERATURE, HUMIDITY, VOLTAGE, CURRENT, CONTACT CLOSURES AND OTHER ANALOGUE AND DIGITAL SIGNALS

VERSATILITY THAT WILL SURPRISE AT A PRICE THAT WILL PLEASE

The DMCP-20A is able to meet almost any data logging and monitoring need, because the measurement conditions can be programmed and almost any type of input can be used. Its performance corresponds to that of much more complex and expensive units.
Due to its versatility, DMCP-20A has a wide range of applications: from process control to storage monitoring, from energy optimization to laboratory data logging, from industrial multiphase control to marine applications.

USER PROGRAMMABLE MEASUREMENT CONDITIONS

Quick and simple. Just go step-by-step through the measurement conditions using the keyboard and display. You can select the values for each input, measurement range, zero point, units, etc. Key in the value, check it in the display and then save it.
You can also set a range, from 1 second to 24 hours, between measurements for scan speed and printing interval. These values can be checked and changed at any time , even during measurement, if you choose.

Once the programs have been saved, they are transferred to a non-volatile memory, which stores them so they are not affected by power failures.
Password protection ensures that no changes can be made except by those authorized.

16/36 MEASUREMENT CHANNELS AND 32 CONTACT CLOSURE CIRCUITS

Channel capacity is more than adequate – select 16 or 36 analoque inputs supplemented by 32 contact closure channels according to the requirements. Subsequent channel expansion can be done without problem using printed circuit boards.
All analoque inputs can be different and independent of each other. Digital inputs may be either non-voltage, open or closed contact circuits. Measurement, printing and data prosessing for each channel can be set exactly according to your needs, and the built-in self calibration ensures precision of measurement.

INPUT IDENTIFICATION

Individual channels are easily identified, because each input can be coded separately using any combination of eight numbers or letters. Just key in the desired ID to the central memory. The same ID will be shown on the display and on the printed record to avoid the possibility of errors.

ALPHANUMERICAL DISPLAY

Channel number and measurement value is easily seen in the large and clear display. Other details are displayed by pressing a key; input identification, units, etc. Individual LED indicators provide information about the run state and alarms. All programmed functions and operations are easy to check by stepping through them using the keyboard and display.

BASIC DATA CALCULATION

The DMCP-20A can also process measured data to give basic values such as mean and peak values. Maximum and minimum values can be obtained fo the required time intervals, values are stored on a continuous basis and this helps to establish variations in a process and in different sets of readings. The mean value for the last 100 readings can also be calculated and printed out for each point.

PRINTOUT AND 8-COLOR PLOTTING

All important information can be printed out, but the DMCP-20A is exceptional because the standard output makes possible both plotting and alphanumerical output. You can get print outs and plots on the same paper and the 8-color printing makes detailed examination easier due to a better separation of plots. The channels and scales selected for plotting can be chosen so that a maximum of eight channels are plotted simultaneously. If necessary, other printers or plotters can be used with standard output messages.

ADJUSTABLE ALARM LIMITS, RELAY OUTPUTS AND SEPARATE LAMP PANELS

Analoque inputs can be programmed with alarm limits and dead band ranges, output delays, priorities and acknowledgements. Channels can also be selected to be in the mean value group with two of the four limits functioning as deviation limits.
External, 2-wire connectable lamp panels provide additional displays about the alarm functions for a single or a set of limits.
Consequent, automatic working and unattended controls in alarm and drive situations can be taken care of using relay outputs (max. 64). Direct computer control is also possible with direct data communication via the serial interface.

TECHNICAL DESCRIPTION

Input channels	16 or 36 analoque inputs + 32 contact closure (when needed)
Programming	Preprogramming with alphanumerical keyboard
Digital display	LED. 2 digit channel display, 4 digit measured value display
Alarm operation	4 programmable upper or lower limits/analoque channel
Stepping speed	1…99s
Inputs	1) Pt-100 ohm resistance sensor -meas. range –200,0…+800,0 °C
	2) Thermocouples (J, K, S, T) - meas. range –260,0…+1600,0 °C -automatic cold junction compens.
	3) Voltage -meas. range 0…1V, input impedance >1 Mohm, customer scaling
	4) Current -meas. range 0…20/50 mA, 4-20 mA, 10…50 mA, customer scaling
	5) Resistance -meas. range 0…500 ohm, customer scaling
	6) Contact closure -open or closed (potential free closure circuit)
Precision	0,1 % of full scale reading ± 1 digit, performs continuos self calibration
Supply voltage	230V 50Hz ± 10%, 24 VDC ± 10%

Memory protection	Program stored in non-volatile memory requires no stand-by power supply
Group average	Max. of 8 mean value calculation groups with two deviation limits for each channel
Peak values	A continuous storage of minimum and maximum values
Mean value	Mean value of the last 100 measurements (for each channel)
Clock	current time, precision better than 1 s/day
Raporting interval	1 min…24 h
Output	1) Centronics connection max. 4xRRU-16 relay units (16 outputs/unit)
	2) RS-485/232 serial interface to PC microcomputer, transfer rate 300…19200 baud
	3) RS-483 serial bus to SLP-16 lamp panels
	4) Centronics connection to printer
	5) Common alarm outputs in 3 different priority class
	6) Supply voltage / self control with relay closure outputs
Weight	2,7 kg
Construction	Wall-mounting case 192x144x250 mm (panel cut-out 184 x 138 mm)
Surrounding temp.	0…45 °C

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